

*Empower  
your facade*

**SKALA**  
**Matrix**

# SOLAR MODULES FOR BUILDING INTEGRATED PHOTOVOLTAICS

## FLEXIBILITY

- Flexibility in size
- Flexibility of glass thickness  
(Standard 4 mm cover glass | 4 mm back glass)<sup>1)</sup>
- High variety of color options and glass finishes

In addition to a standard size, the module sizes can be scaled, providing the highest degree of flexibility.

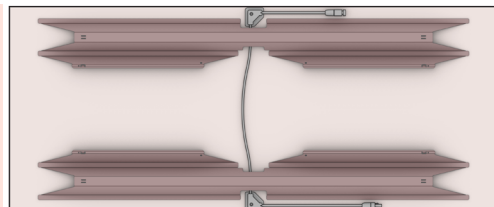
## POWER

- High power thanks to crystalline cell technology - up to 180 W/m<sup>2</sup>
- Maximization of the aperture area through an efficient cell layout
- Project-specific adaptation of wafer sizes (depending on the focus on costs, performance or aesthetics)

## MOUNTING AND MAINTENANCE

- Low cleaning and maintenance costs
- Frameless - therefore reduced soiling
- Simple, standardized fastening systems with or without backrails
- Backrails glued to the back of the module according to General Building Approval Z-70.1-224<sup>2)</sup>

Owing to our proven backrail system, SKALA Matrix modules are compatible with a variety of substructures.



<sup>1)</sup> Deviations upon request

<sup>2)</sup> For module sizes between (L × W): 1.2 m × 0.6 m and 2.2 m × 1.2 m



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## ELECTRICAL SPECIFICATION

Data measured under standard test conditions (STC) for full size PV modules:

SKALA Anthracite	1,590 x 710 mm <sup>2</sup>	1,590 x 710 mm <sup>2</sup>
Wafer size	M6H	M6H
Busbar cover	With	Without
Nominal power P <sub>nom</sub>	182 W (161 W/m <sup>2</sup> )	200 W (177 W/m <sup>2</sup> )
Sorting	±5%	
Module efficiency η	16,1%	17.7%
Open circuit voltage V <sub>OC</sub>	23.5 V	23.6 V
Short circuit current I <sub>SC</sub>	9.6 A	10.5 A
Voltage at mpp V <sub>mpp</sub>	20.0 V	20.0 V
Current at mpp I <sub>mpp</sub>	9.1 A	10.0 A
Max. overcurrent protection I <sub>R</sub>	15.0 A	
Max. system voltage V <sub>sys</sub>	1,000 V	

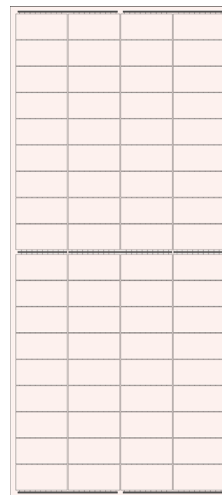
STC values are valid after stabilization with light according to IEC 61215.

STC: Irradiance 1,000 W/m<sup>2</sup>, module temperature 25 °C, spectral light distribution according to atmospheric mass (AM) 1.5.

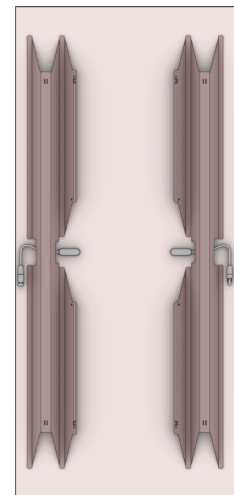
Temperature coefficient	Value
Temperature coefficient P <sub>nom</sub>	-0.39%/°C
Temperature coefficient V <sub>OC</sub>	-0.31%/°C
Temperature coefficient I <sub>SC</sub>	0.05%/°C
Operating temperature range	-40 °C up to +85 °C

## MECHANICAL SPECIFICATION

Characteristic	SKALA Matrix
Thickness (laminate + backrail)	9 mm + 33 mm
Weight	23 kg/m <sup>2</sup>
Cell type	PERC - Mono cSi
Frame	Frameless
Front glass	4.0 mm single-pane safety glass
Rear glass	4.0 mm single-pane safety glass
Encapsulant	POE



Front side of the module



Rear side of the with backrail system for Hook-in mounting

## CERTIFICATION

Design qualification and type approval: IEC 61215:2016
Safety qualification: IEC 61730:2016

Bronze	Light Green	Green	Light Blue	Blue	Dark Blue	Light Grey	Grey	Anthracite	Black
170 W	160 W	170 W	175 W	165 W	175 W	155 W	170 W	180 W	190 W

